## I claim:

1. A valve mechanism, comprising:

at least one driven cam element;

a flexible surround element formed with a plurality of plates and joint pins connecting said plates, said cam element being rotatably disposed in said flexible surround element about an axis of rotation; and

a valve actuator driven by said cam element, said valve actuator being movably connected to said flexible surround element for movement of said valve actuator in a plane perpendicular to the axis of rotation of said cam element.

- 2. The valve mechanism according to claim 1, wherein said flexible surround element is a roller chain formed with said plates and said joint pins.
- 3. The valve mechanism according to claim 1, wherein one of said joint pins is a bearing pin movably connecting said valve actuator to said surround element.
- 4. The valve mechanism according to claim 1, wherein said flexible surround element comprises an open loop with two ends fixed to a holder of said valve actuator.

- 5. The valve mechanism according to claim 4, wherein said two ends of said open loop are formed with insertion orifices for receiving the holder of said valve actuator.
- 6. The valve mechanism according to claim 1, wherein said flexible surround element comprises a closed loop formed with a holder of said valve actuator.
- 7. The valve mechanism according to claim 1, wherein said flexible surround element comprises a loop formed with a bulge for receiving a holder of said valve actuator.
- 8. The valve mechanism according to claim 1, which comprises a holder connecting said valve actuator to said surround element, said holder being composed of two parts enclosing said valve actuator.
- 9. The valve mechanism according to claim 1, which comprises a holder for said valve actuator and said valve actuator is arranged adjustably in length on said holder.
- 10. The valve mechanism according to claim 1, which comprises a holder for said valve actuator and said valve actuator is rotatably supported in said holder.

- 11. The valve mechanism according to claim 1, which comprises a feed device with a feed orifice for supplying a friction-reducing medium into a space between a peripheral surface of said cam element and an inner surface of said flexible surround element.
- 12. The valve mechanism according to claim 11, which comprises a hollow carrier shaft supporting said cam element and having at least one bore formed therein, and wherein, for an internal supply of the friction-reducing medium, said cam element is formed with at least one bore that extends radially with respect to said axis of rotation and is aligned with said at least one bore in said carrier shaft.
- 13. The valve mechanism according to claim 1, wherein said surround element is formed of two axially spaced-apart cam regions and a central region forming a circumferential groove.
- 14. The valve mechanism according to claim 13, wherein a holder for said valve actuator or a valve actuator adjustment device engage into said circumferential groove of said central region.
- 15. The valve mechanism according to claim 1, wherein a feed opening is formed for feeding friction-reducing medium into said circumferential groove.

16. The valve mechanism according to claim 1, which comprises a carrier shaft supporting said cam element and having at least one bore formed therein, and wherein said cam element is formed with at least one bore aligned with said bore of said carrier shaft, and a pin inserted in said bores for securing said cam element against a rotation on said carrier shaft.